

Name: Anthony R. Brach, Botanist, U.S.A.

Questions:

1. **When** and **how** did you first hear about the Shroud?

In 1978 while in 10th grade, I first became interested in the Shroud of Turin while reading a chapter by Dr. Pierre Barbet, MD and seeing a photo of this unusual image. I have been following the botany of the Shroud since the spring of 1997, when I saw a sign announcing a talk about the "Flora of the Shroud" at Missouri Botanical Garden by Prof. Avinoam Danin of the Hebrew University of Jerusalem.

2. What interested you about the Shroud?

It was remarkable that such a cloth could still possibly exist from 2000 years ago which witnessed the burial and resurrection of Jesus. As a botanist, hearing of plant images of thorns and spring flowers from the Jerusalem-area on the Shroud was intriguing.

3. Do you believe the Shroud is likely the burial cloth of Jesus Christ, a fake relic, or are you uncertain what to believe?

Yes, the Shroud is very likely the burial cloth of Jesus Christ.

4. What, if any, actions did you take after you first encountered the Shroud (e.g., conduct research, contact people involved with it, etc.)?

I contacted Professor Avinoam Danin and Dr. Alan Whanger who provided information about their studies (e.g., email correspondence and CSST News (Council for Study of the Shroud of Turin, Durham, NC).

5. Have you ever seen the Shroud at any of the exhibitions? If yes, which years?

No, I have not seen the Shroud in person; however, I did use the webcam on the Sindone page (<http://sindone.torino.chiesacattolica.it/en/welcome.htm>) during the exhibition to view the exhibition; and I have viewed many of the photographs and images of the Shroud which Dr. Whanger and others have shared (CSST's website: <http://www.shroudouncil.org/> and <http://www.shroud.com/> and <http://shroud3d.com/>).

6. What did you experience when you were in the presence of the Shroud?

I was excited to view even the webcam image during the exhibition since I did not travel there.

7. Have you ever been involved in any scientific study of the Shroud? If yes, please describe **what motivated** your work and **why**.

Dr. Alan & Mrs. Mary Whanger and Prof. Avinoam Danin consulted with me on their draft *Flora of the Shroud of Turin* (Missouri Botanical Garden Press, 1999). I reviewed their paper as both a scientist and an editor (a botanical editor for an international floristic project). I have been impressed by their professional, detailed research and their dedication. I have regularly corresponded with Dr. & Mrs. Whanger and Professor Danin about their continued research. Since O. Scheuermann and Alan Whanger hypothesized that coronal electrostatic discharge was involved in imaging the flowers and thorns onto the Shroud, in 1997, I prepared xerox copies (and later image scans in 2007) of representative herbarium specimens for CSST's comparative studies. The electrostatic copies show similarities, e.g., margins and sharp points, to the Shroud images and those experimentally produced with a van der Graaf generator by O. Scheuermann.

8. Have you ever written anything about the Shroud, either factual or fictitious? If yes, please describe **what motivated** your work and **why**.

I am interested in the interdisciplinary areas of science and religion, e.g., environmental stewardship, biblical plants, and as explained here, botany and sindonology. I wanted to share the Whangers' and Danin's findings with others since they have been particularly fascinating to me. I included thoughts about the Shroud within a compilation of Scriptural quotes and reflections (*Leaves of Prayer – Scriptural Passages and Catholic Reflections for Those Who Enjoy Nature*). I included images of a flower (*Anemone coronaria*) and of a thistle (*Gundelia tournefortii*) from pressed specimens in an herbaria which are among the plant species identified on the Shroud.

9. Do you favor or believe any of the current theories on how the image got onto the cloth? If so please name the theory.

As the Whangers suggested, I think that both ionization was involved in creating the image of the body and an electrostatic charge was involved in imaging the flowers and thorns and other articles (arma Christi) onto the Shroud.

10. Do you feel that you have a calling or vocation to be involved somehow with the Shroud? If yes, please describe **what motivated** you to make a commitment to the Shroud and **why**.

As a scientist, I am committed to solving problems and answering questions. As a Christian, I am committed to Jesus and sharing the Good News about His Resurrection. As Pope John Paul II said, "truth cannot contradict truth." Both science and faith are important to me and to our world today.

Please describe below any other *personal* reflections, experiences, insights, or thoughts about the Shroud of Turin that you would like to share.

"In the book *The Shroud of Turin—An Adventure of Discovery* by Dr. and Mrs. Alan and Mary Whanger, we learn that recent scientific research indicates that a tremendous amount of energy at the Resurrection imaged Jesus and surrounding articles onto His burial Shroud. Dr. Bensen estimated that the electro-potential could have amounted to 100 million to as much as 200 million volts. Yet the energy release was focused and gentle, not destructive. Dr. Thaddeus Trenn called this a process of "weak dematerialization" whereby the subatomic particles overcame the strong nuclear bonds holding each atom together." "The burial shroud of Our Lord recalls not only His passion and death but also His Resurrection on Easter morning. Images of the terrible instruments of His death and the loving flowers left surrounding His Body are imprinted upon the cloth, a sign of forgiveness and reconciliation. The Holy Face of our Risen Lord shines beyond the veil separating this world and the next." (Anthony R. Brach. *Leaves of Prayer*, 2002).

Writings/Websites/Blogs:

Book:

Leaves of Prayer: Scriptural Passages and Catholic Reflections For Those Who Enjoy Nature. 2002. iUniverse. http://www.iuniverse.com/bookstore/book_detail.asp?isbn=0-595-23707-X

Web page:

Images of "xeroxed" (photocopied) and digitally scanned herbarium specimens of selected plant species identified on the Shroud by Professor Danin and Dr. & Mrs. Whanger.
<http://community.webshots.com/user/anthonyrobert777>

Plant Evidence on the Shroud of Turin:

<http://www.people.fas.harvard.edu/~brach/shroud.html>