# **Teaching Portfolio**

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Ph.D.: Dermatological Immunology; Postgraduate Specialization: Clinical Pathology-Applied Diagnostic Techniques; I Master: Biological Sciences; II Master: Natural Sciences (Combined Bachelor's/Master's Degrees); \*Foreign Academic Credentials evaluated and authenticated by World Education Services, New York\* High School Diploma (5 years): Applied Art & Design



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#### 1. Teaching Philosophy

I believe in teaching as a mission with the objective of making students learn the content of each course, but also with the goal of developing life-long learning skills and critical thinking. These are very important qualities, which will prepare students for both their future professions and as human beings involved in the progress of our society.

I think that interaction with students is necessary to improve the level of higher education. Teachers should be like bridges between students and their field of studies; modern knowledge should have an interdisciplinary focus. I have a strong biomedical background and much experience in my field, as well as a background in Applied Arts & Design. Furthermore, I took pre-MBA classes (T.J.U.) and business workshops (UPenn-Wharton School) where Psychology is often applied to different aspects of business. This led me to the realization that similar psychological approaches could be applied in Education as well. Because of this background, I can offer a mixture of lectures, discussions, and laboratory work. This variety of instruction can help students make connections with different levels of knowledge and clarify concepts between various fields of study.

In today's world teachers can no longer be only dispensers of knowledge. They should be sensitive to the needs and interests of students and to the demands of the work market. Teachers should communicate effectively, not only with students, but also with other faculty members, sharing their experiences with the goal of continuously improving their teaching. Knowledge and skills are important, as are other qualities such as being an adviser, an encourager, a stimulator, a mentor, a resource, a researcher and a patient person. I believe that these are some of the necessary qualities needed to become an outstanding educator, which implies that not every expert in their field of research is an excellent teacher.

I try to meet my students' needs regardless of their previous knowledge, background and learning abilities. Furthermore, I tailor the materials to the needs of each student in my private tutoring. I have meet and help students to overcome difficulties in class by using a variety of techniques and teaching styles. I receive new ideas from students' feedback and comments, the more I teach the more I learn. It is a lifelong process. In each of my classes, my goal is to share my knowledge and to pass it to my students keeping in mind that a good teacher should also inspire them in their future professions and in their everyday lives as young adults ready to make their contribution to the future of our society.

Physiology teachers know that human beings can perceive their surrounding environment "only" through our five senses, because we have an anatomical nervous system that is not **physiologically designed** to perceive everything or every dimension in our environment, as it can process only information from a limited part of reality (<u>http://cinziasevignani.wordpress.com/</u>). Indeed, our five senses can only perceive a small part of the physical reality: for example, our eyes are limited in the range of electromagnetic frequencies they can see, and so are our ears when it comes to sound. Similarly, other animals have different ranges of perception. Those inputs are processed by our nervous system and brain, which is the tool used to construct our external reality.

Are all human beings processing these points of information to build models and/or patterns in the same way? The answer is "no", otherwise we would not have different teaching approaches and a learner-centered pedagogy wouldn't make sense. In the past, different learning styles were grouped as follows: **Visual learning (visuospatial information), Auditory learning (listening, talking), Experiential/Kinesthetic learning** (by doing, hands-on). **Visual learners** (~ 65% of the population) need to see what they are learning and benefit from looking at charts and pictures. Auditory learners (~ 30%) will benefit from class lectures by listening. Experiential learners (~ 5%) learn better by doing and from clinical work, according to Prof. William C. Bradford, Indiana University School of Law. Regarding different learning styles, I also like to mention a small category of the population, highly sensitive people (HSP ~ 10 % of the general population) who are not necessarily introverted. They don't usually like to interact through group discussion because they process information with a slower but deeper pattern of thinking and they can be easily overwhelmed, according to **Dr. Elaine Aron,** author of The Highly Sensitive Person.

The learning process is complex. There are other differences in a general population. Approximately 75% of people are Linear thinkers (step-by-step approach to solving problems) and the remaining are Organic thinkers (big picture approach), according to **John Heckers, MA, CPC, BCPC,** President of Heckers Development Group, LTD an executive coaching and consulting firm based in Denver, Colorado. "Linear thinkers are prominent in government, accounting, some of the sciences, engineering, and large corporations. Organic thinkers tend to be found in non-profits, humanitarian pursuits, small companies, the arts, physics and other creative sciences, psychology, medicine, and many other professions. Look for Organic Thinkers wherever independent and flexible thought outside of the box is required for success", according to **John Heckers, MA, CPC, BCPC).** Usually, linear thinkers can perform better if the learning material is presented in organized parts and in logical steps. Organic thinkers need to have an overview and then more and more pieces of information can be incorporated and create a network inside a larger frame of knowledge.

Categories are not always so well defined and they often overlap to some degree. I don't think it is a good idea to label people as a defined group. This creates misunderstandings and prejudices. Additionally, there are other factors to be taken into account, because of the diversity in the process of learning. This leads to a constructed knowledge from personal experience that is different in each individual. Every person processes incoming external information combining visual, verbal, auditory, and experiential learning. The teaching approach should take into account the nature of the subject students need to master. For example, students in a health profession course would benefit more from an experiential (hands-on) approach than students enrolled in a history course. Most important, teaching materials should be presented in a variety of ways, to the greatest extent possible, in order to make the knowledge more accessible to all students. The three principles of <u>Universal Design for Learning (UDL</u>), which borrowed the term of universal design from architects and designers, illustrate how important it is to present class materials in multiple ways to promote engagement at different levels and to tap into learners' interests in an appropriate manner. This will motivate students to learn and ultimately to become self-learners.

Human beings are naturally curious animals from early childhood, as previously described by Dr. Maria Montessori, one of the pioneers in the field of applying new teaching tools in Education (<u>http://www.casamontessori.com/montessori.htm;</u> <u>http://www.montessoriforeveryone.com/Tendencies-of-Humans\_ep\_73-1.html;</u> <u>http://www.infed.org/thinkers/et-mont.htm;</u>

http://www1.teachertube.com/search\_result.php?guery=montessori&type=videos&page= 1). The learning process in adults can be made more effective, if new material is related to previous background knowledge and/or there is a personal attachment or life experience that can be related to the abstract concepts of a lecture. A small percentage of students are motivated no matter what and they would do anything to became a "Doctor"; for the majority of the students there are additional ways to improve motivation and to open doors to other possible professions in life, previously not thought of. For example, one of my Anatomy & Physiology students decided to become an acupuncturist rather than a lab technologist following my lecture on the respiratory system. It was enough to ask the students to become aware of their breath and to try a couple of simple breathing techniques to change the class environment from boring/passive to engaged/interested. My approach helped the students to consciously be aware of the most important system in human physiology and at the same time to see the act of breathing with new eves or how it can be related to the whole body. Later, my student was grateful for my practical approach in that particular lecture that opened a new door in her mind. Currently, she is very happy doing a job that she really loves.

Introducing new concepts and/or skills is a complex task and students need to use a range of cognitive skills in order to remember the new information. Visual images, modeling, drawings and videos can be use to facilitate retrieval of information from previous classes and/or learning experiences. It is important to provide a way to visualize and form associations regarding what students are learning in class. Visual teaching tools can help in the long-term memory consolidation process. I tried a new visual approach in my Biology labs. The goal was to help students to retrieve part of their prior knowledge and/or to be able to relate the new information with real life experience.

I often use questions to introduce different topics and for the educational videos that student are supposed to see, sometime before or after classes, depending on the course level. I believe that questions are one of the best tools that can be used to stimulate curiosity, especially if we can relate them to a real life experience and not only to abstract concepts. In this way, words, formulas and theories will be supported by facts that will lead to a "deeper internal" learning that hopefully will be retained after the "traditional grading methods"/exams are over!

# **2.** Descriptions/Examples of approaches used to Improve Teaching and Anonymous Student Surveys

I selected educational videos for BIO1111 that were related to their practical experience in Labs when doing dissections or about different kind of disinfectants of common use and why they have different chemical properties. I also presented educational videos on Invertebrates or simple plants used as bio-indicators to detect pollution in different environment.

Regarding Genetics students, who are taking an upper level course that require to master concepts with more details, I selected educational videos that could introduce the written theory and practical part of the Labs in a visual manner.

I used an anonymous survey online (<u>http://www.surveymonkey.com/</u>) to evaluate few sections of Temple Bio Students' Responses to one of my new approaches on **Visual Learning**, in this case educational selected videos.

I think that the outcome was very positive and I also found very interesting that the percentages obtained from Students' Responses are very similar to the percentage of Visual Learners in the general population, as previously described.

# 1 Question on Surveymonkey: How helpful are the educational videos selected by your LAB Instructor in preparing for the LAB Exams (**BIO1111/Spring 2012**)?

 61.5% answered that educational videos that I selected were Very Helpful, while only 23.1% considered very helpful the standard/regular LAB Assignments, which are also been used in BIO1111 LABS during the last years.

# 2 Question on Surveymonkey: How helpful are the educational videos (DNA Learning Center) selected by your **Genetics (2296/Spring 2012)** LAB Instructor?

- ✤ 66.7% answered that educational videos that I selected were Extremely Helpful.
- And here are shown three text Students' Responses:
  A.) I really thought they helped and every TA should post them.
  B.) The videos help me to remember the concepts of the lab better. It is also a good introduction to the lab before I start reading about it.
  C.) More videos like this before lab would be a great tool to further conceptualize what we will be doing in lab the next week.

# **3. Summary of Teaching Experience**

 2009 - Present: Teaching Assistant Professor in Biology: Cell Structure, Genetics and Bio – Labs (Biology/Labs 3096-2203-1111); Lecture Coordinator, Mastering Biology (BIO1111), College of Science & Technology, Department of Biology, Temple University, Philadelphia.

- 2011 Summer II: Adjunct Professor in **Human Physiology (DPT8512**-Lectures), College of Health Professions, Department of Physical Therapy, **Temple University**, Philadelphia.
- Spring 2009: Adjunct Faculty; Genetics Labs (Biology 2203), College of Science & Technology, Department of Biology, Temple University, Philadelphia.
- 2009 Summer I & II: Adjunct Faculty; Anatomy & Physiology [I & II] (BIO 103/104: Lectures and Labs), Harcum College, School of Allied Health Science, Department of Biology, Bryn Mawr, Philadelphia.
- 2008: Laboratory Teaching Associate of Molecular Diagnostic Techniques (Graduate and Undergrad. – Bioscience Technologies: Medical Technology – MT507: Clinical & Molecular Lab Techn/CT307: Cellular & Molecular Lab Techn) - College of Health Professions, Thomas Jefferson University, Philadelphia.
- 2005-2008: Established my teaching experience as Co-Coordinator of GE637: Advanced Human Genetics, and Lecturer (GE637 and GE612) of "MicroRNA genes and human disease" (Ph.D. Program – Biomedical Sciences – Genetics). Kimmel Cancer Center, Thomas Jefferson University, Philadelphia. 2007: The MUSMIRSUS (Mus miRNA susceptibility loci) DATABASE (Version II) was created to compare the positions of microRNA (miRNA) genes with the positions of solid tumor susceptibility and modifier loci in the mouse. 2002-2005: Patent: microRNAs located in or near cancer associated chromosomal feature. <u>http://patents.com/us-7723030.html</u>; http://www.patentgenius.com/patent/7723030.html
- 2005 2009: Italian Teacher at the America-Italy Society (2005-2007) and TUCC (Summer 2009-NC). I taught as a part-time Italian Instructor for adults at the America-Italy Society and TUCC (Temple University Center City) in Philadelphia. I have a Professional Development Certificate in Teaching Italian in a Learner-Centered Approach (Learner-Centered pedagogy), in which the courses are tailored to the student needs, from The University of Pennsylvania. I always wanted to be a motivator and a stimulator for my students setting goals and priorities for their specific needs to learn another language. For examples, Engineers need to learn a technical language for specific purposes and tourists need to learn basic words to express basic needs and emotions in order to establish some kind of communication in a foreign country.
- 1988 2008: In addition to teaching experience, I have done research in Biomedical/Cancer Biology field as showcased in thirty-two publications listed in PubMed (http://www.ncbi.nlm.nih.gov/pubmed?term=Sevignani C).

### 4. Professional and Curriculum Development: Activities to Improve Teaching

I have, as much as my very busy working schedule allowed me, attended workshops, seminars, professional conferences and meetings on teaching offered by the **TLC** (*Teaching Learning Center*) at Temple University to share or integrate ideas and teaching tools (see below: **Teaching Workshops and Conferences Attended**). For example, I have participated in workshops and conferences on teaching and learning in a diverse classroom, using writing as a teaching/learning tool, introducing active learning into the classroom, getting students to help each other learn new concepts and engaging students in effective discussions. Participation in these workshops and conferences has led me to implement new pedagogical approaches and tools to improve my students' learning. By attending these events, and sharing my ideas with the TLC or other participants, I believe that I also have started a new University-wide dialogue on teaching by exchanging ideas with colleagues from different disciplines. Furthermore, I earned the **Teaching in Higher Education Certificate for Faculty** in May 2014. I successfully completed Part One: **Educational Psychology - EPSY 8985** during the Spring Semester 2013 and Part Two: **Educational Technology - EPSY 8960/ED 5804** during the Spring Semester 2014 (Please, see Attachments, in addition to the Annual Report of Faulty Activity). This <u>TLC</u> graduate-level course focuses on the research on how people learn and best teaching practices, including course design.

### 5. Teaching Projects: Community Involvement and New Course Proposal

Art Workshop: January 6<sup>th</sup>, 2013 (Sunday, 7 pm) at <u>Gift of Life – Family House</u>. The Family House brings family members, patients awaiting life-saving transplants, and organ transplant recipients together under one roof and supports them through lodging, meals, transportation and supportive services.

**Workshop Title: The Art of Collage & Decoupage, Recycling every piece of paper!** Description and Objectives: I believe that people of any age can benefit from this workshop in their everyday life. It is a way to be creative for our personal use and make our home beautiful by using old images, any kind of colorful wrapping paper and tissue paper. We also have the opportunity to make wonderful gifts for family and friends! As other form of Visual Arts, collage can also be a form of Art Therapy that can help human beings to relax and express themselves without words. It was written by *Meister Eckhart* that our soul speaks to us by images: "When the soul wishes to experience something she throws an image of the experience out before her and enters into her own image." And as we all know: "A picture is worth a thousands words."

(http://www.flickr.com/photos/cinzia\_roberta/sets/72157626010702376/)

- I also taught, as a Certified Meditation Instructor (Arsenijevic Institute), Summer Classes (2011) for adults (some of my students were: Psychotherapist, PhD Psychologist, person with chronic back pain) at <u>Art of Wellness Center</u>, an Integrative Holistic Healthcare Center that embraces both the Western and Eastern natural healing philosophies and treatment approaches. This short Summer course was designed to gain basic principles of meditation (theory, philosophy, psychophysiology, health benefits) and to apply them to the basic concepts of daily practice (<u>http://cinziasevignani.wordpress.com/classes/</u>).
- New Course Proposal. I started to write it in 2010 for a cross-listed elective course: Fundamentals of Human Psychophysiology. The goal of this course is to provide the students with an opportunity to learn basic facts and principles of mind-body biology and psychophysiology. The course will be focused on cellular

physiology, respiratory, endocrine, nervous, sensory systems (vision, hearing, somatic sensation/touch, taste and olfaction/smell), biology of stress & Psychoneuroimmunology. Mind-body relations will be studied as part of a larger context of the surrounding Environment. The topics to be discussed have been selected to be relevant to the modern knowledge of psychophysiology and related fields. Guest speakers, who are leaders in their subject of study, will be invited to share their expertise in various fields, including neuroscience, neuroimaging, clinical psychology and medical yoga (or their research papers will be presented and discussed in class). Their contribution will be useful to widen student's understanding of topics covered in this course. Special emphasis is placed on the mind-body-environment interactions, including biology of stress and psychophysiological symptoms. At the end of the course, students will have: Learned basic principles of human psychophysiology and Psychoneuroimmunology; Developed skills in identifying, accessing and evaluating sources of information (Research Reports); Improved thinking, learning and communication skills (Group Papers); Ethical reflection, civic engagement, awareness of current issues (Group Projects); Collaborative work and teamwork skills (Group Projects); Curiosity and lifelong learning; Able to apply new knowledge to their everyday and professional lives (End of Semester: Reflective Essay or Short Answers Essay Test).

## 6. Fundamentals of Psychophysiology: Anonymous Student Surveys and Responses

- Are students interested in a New Course on Psychophysiology?
   I asked them by using by using an anonymous survey online > <u>http://www.surveymonkey.com/.</u>
- ✤ 86.3% are Extremely < > Very interested
- Furthermore, I also asked them the following question: If you could design a course that you would definitely take, what would the subject matter be?

Here -four responses- are listed in chronological order as they were received and they are selected from students' written comments [to see all (12) > login> <u>http://www.surveymonkey.com/</u>]:

- 1) "Psychobiology/Stress related biology".
- 2) "This course seems very interesting. It can certainly be an elective course rather then the core course. I am not sure if any other course provides this sort of information but this course can achieve a lot if teach in detail. My subject matter for this course would be the people not only proceeding towards neuroscience but also would be good for human psychology!"
- 3) "If I had to design a course that I would definitely take (pertaining to the psychology/physiology aspect) it would show how the mind and brain works in conjunction with physical actions combining theories from psychology and put them in a more biological aspect (for example how the unconscious as a theory can be enhanced by biology behind how the brain works)".
- 4) "Overview of psychobiology from the molecular to systems levels".

# 7. Teaching Workshops and Conferences Attended - Presentation

- JANUARY 17, 2014: 9:00:00 AM 5 PM |Main Howard Gittis Student Center, Room 200. C. Sevignani: Improving students' comprehension of Biology Labs with Audio-Visual materials. Poster presented at <u>12th Annual Faculty</u> <u>Conference on Teaching Excellence</u> - This regional conference features Marsha Lovett and Michele DiPietro, co-authors of the groundbreaking book *How Learning Works: 7 Research-Based Principles for Smart Teaching*. Our plenary speakers will deliver keynotes synthesizing 50 years of research from cognitive, motivational, and developmental psychology, as well as diversity and inclusion studies. In addition to our exciting plenary sessions, there will be breakout sessions on related topics, facilitated by Temple University Provost's Teaching Academy faculty, and a poster session on best teaching practices, featuring submissions from faculty around the region.
- JANUARY 16, 2013: 9:00:00 AM 3:30:00 PM |Main Howard Gittis Student Center, Room 200. 11th Annual Faculty Conference for Teaching Excellence -This regional conference focuses on critical challenges in teaching and learning and how to address them.
- AUGUST 24, 2012: 1.30 PM, The Writing Center Tuttleman Learning Center, Room 201. Consistent, Transparent and Efficient: Strategies for Grading Students' Writing.
- AUGUST 24, 2012: 12 PM, The Writing Center Tuttleman Learning Center, Room 201. Comments that Work: Strategies for Responding to Student Writing.
- AUGUST 23, 2012: 2:15 PM, The Writing Center Tuttleman Learning Center, Room 201. Designing Effective Writing Assignments.
- AUGUST 13, 2012: 9:00:00 AM 10:30:00 AM | Main TLC Conference Room, TECH 112. Instructional Consultation.
- MAY 23, 2012: 9:00:00 AM 10:00:00 AM | Main TLC Conference Room, TECH 112. Instructional Consultation.
- JANUARY 11, 2012: 8:30:00 AM 3:00:00 PM |Main Howard Gittis Student Center, Room 200. 10th Annual Faculty Conference on Teaching Excellence -This regional conference focuses on theories and research relevant to learning and cognition and how we can apply them in our day-to-day teaching to enhance our students' learning. This year's keynote speaker will be Linda Nilson. The keynote session provides an intensive overview of the leading psychological theories and research relevant to learning and cognition and how we can apply them in our day-to-day teaching to enhance our students' learning. Specifically, it addresses these topics as they affect learning and memory: 1) factors that attract and hold human attention/focus, as well as those that distract it 2) emotional intensity 3) the conditions under which feedback does and does not improves performance. Linda B. Nilson is founding director of the Office of Teaching Effectiveness and Innovation (OTEI) at Clemson University and author of Teaching at Its Best: A Research-Based Resource for College Instructors, now in its third edition (Jossey-Bass, 2010) and The Graphic Syllabus and the Outcomes Map: Communicating Your Course (Jossey-Bass, 2007).

- JANUARY 16, 2012: 1:00:00 PM 2:30:00 PM | Main TECH Center Room 107 Beyond Breaking the Ice: Setting Up an Effective Learning Environment on the First Day of Class (for TAs).
- DECEMBER 6, 2012: DEC 13, 1:00:00 PM 2:30:00 PM | Main TECH Center Room 107. TLC Series on Professional Development: Developing a Teaching Portfolio.
- OCTOBER 31, 2011: 3:00:00 PM 4:30:00 PM | Main TECH Center room 109. PowerPoint: Design & Deliver an Engaging & Effective Presentation.
- SEPTEMBER 27, 2011: 6:00:00 PM 6:30:00 PM | Main TLC Conference Room, TECH 112. Instructional Consultation.
- SEPTEMBER 27, 2011: 10:30:00 AM 11:30:00 AM |Main TLC Conference Room, TECH 112. STEM the Tide.
- SEPTEMBER 26, 2011: 1:00:00 PM 2:30:00 PM | Main TECH Center Room 111. Beyond Plug & Chug: Teaching a Problem Solving Process.
- SEPTEMBER 22, 2011: 3:00:00 PM 4:30:00 PM | Main TLC Conference Room, TECH 112. Save Time, Teach Well.
- SEPTEMBER 16, 2011: 12:30:00 PM 2:00:00 PM | Main TLC Conference Room, TECH 112. Facilitating Meaningful Discussion in the Classroom (for TAs).
- SEPTEMBER 23, 2010: 2:00:00 PM 3:30:00 PM | Main TECH Center Room 111. Developing a Teaching Philosophy.
- SEPTEMBER 14, 2010: 1:00:00 PM 2:30:00 PM | Main TLC Conference Room, TECH 112. Can We Talk? Increasing Student Engagement through Structured Discussions.
- AUGUST 31, 2010: 1:00:00 PM 2:00:00 PM | Main TLC Conference Room, TECH 112. TLC Teaching Consultation.
- AUGUST 19, 2010: 2:00:00 PM 3:30:00 PM | Main TLC Conference Room, TECH 112. Improving our Teaching by becoming Critically Reflective Teachers.
- AUGUST 17, 2010: 1:00:00 PM 2:30:00 PM | Main TLC Conference Room, TECH 112. What would you do? Dealing with challenging situations and students.
- SEPTEMBER 11, 2009: 1:00:00 PM 2:00:00 PM | Main TLC Conference Room, TECH 112. Instructional Consultation.

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"The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires."  $\sim$  William Arthur Ward