



FABIANA GALEA, Ph.D. (née N. Fonseca)

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www.FabianaGalea.com

BIO

I am an independent medicinal plant scientist, educator, and artist with deep technical expertise and a proven ability to solve complex problems in new ways. My approach is to research and investigate, uncover resources, and understand and appreciate the unusual so patterns and insights can be conveyed simply to help others comprehend problems in a different light. A designer and innovator with proven success in working with a variety of cultures and perspectives, I use these insights to design, create, and produce avant-garde material concerning botanical research, education, and community outreach.

EDUCATION

Ph.D., Analytical Chemistry, Yale University/University of São Paulo. Focus: Qualitative and quantitative chemical microanalysis of herbal extracts.

M.S., Phytochemistry, University of São Paulo. Foci: Phytochemistry and production of secondary metabolites using plant cell cultures.

B.S., Pharmacy, University of Ribeirão Preto. Focus: Development and quality control of medicines.

Fluent in English, Portuguese, and Spanish

SELECTED PROFESSIONAL EXPERIENCE

Fabiana Galea Studios, San Carlos, Calif. (2015 - Present)

OFFICINA MAGICA: Creating and leading the efforts to launch and publicize this art-meets-science production aimed at raising awareness of the cultural legacies of medicinal plants through visual storytelling.

LIGUSTICUM PORTERI MONOGRAPH: Reviewed and selected relevant scientific information about the therapeutic actions of *Ligusticum porteri* (Oshá Root) and related species and wrote a review for the nonprofit American Herbal Pharmacopoeia.

www.FOLHAS SAGRADAS.org: Conceptualized, curated the contents, created all artwork, and built digital platform to serve as a place where plant aficionados can meet and share plant-related knowledge.

THE HERBAL PANTRY: Currently developing a series of interactive workshops exploring how to reintroduce medicinal herbs into our daily lives by readapting traditional and/or ancient recipes to contemporary times.

New York Botanical Garden, New York, N.Y. (2010 - Present)

HONORARY RESEARCH ASSOCIATE: Planned, researched, collected data, and analyzed how immigrants adapt their medicinal and religious plant knowledge in a foreign landscape. INSTRUCTOR: Planned and taught courses involving chemistry, biology, pharmacology, and ethnobiology of plants.

Columbia University, New York, N.Y. (2008 - May 2009)

POSTDOCTORAL RESEARCH SCIENTIST: Planned, researched, and worked on the discovery of drugs from natural sources for the eye disease age-related macular degeneration.

National Institutes of Health Botanical Center at Memorial Sloan Kettering Cancer Center, New York, N.Y. (2007- 2008)

POSTDOCTORAL RESEARCH SCIENTIST: Planned, researched, and conducted study on the impact of Echinacea extracts on non-specific and virus-specific cytotoxic T lymphocyte activation.

Triarco Industries, Wayne, N.J. (May 2006 - September 2007)

PRODUCT DEVELOPMENT SCIENTIST: Planned and conducted research program focused on developing an ethnopharmacological-based herbal product for metabolic syndrome.

Proteolix, Inc. (acquired by Amgen), South San Francisco, Calif. (2004 – 2006)

ANALYTICAL CHEMISTRY SCIENTIST: Co-invented Kyprolis® (carfilzomib) formulation, an FDA-approved, billion-dollar cancer drug. Managed the transfer of methods to assess the drug's efficacy and quality for the phase I clinical trial.

Yale University, New Haven, Conn. (2002 - 2004)

POSTDOCTORAL RESEARCH SCIENTIST: Collaborated on new approach to chemically knock out proteins in living cells by targeting the proteasome pathway.

ART EXHIBITIONS AND PRIZES

- 2009 *Officina Magica: Herbae Culinarie* (June 2019), solo show, Avenue 25 Gallery, San Mateo, Calif.
 Interpretations of Light (December 2018), juried group show, Avenue 25 Gallery, San Mateo, Calif.
- 2018 First Place, Darrell Posey Prize for Photography - technical division (August 2018). XVI Congress of the International Society of Ethnobiology, Belem do Pará, Brazil. Photo: "A Candomblé practitioner chants a prayer while preparing a healing bath with basil (*Ocimum basilicum* L.)."
 First Place, photojournalism division, San Mateo County Fair, San Mateo, Calif. (May 2018). Photo: "Healing with Sacred Plants."
 Second Place, special effects - photographic division, San Mateo County Fair, San Mateo, Calif. (May 2018). Photo: "Parsley - *Petroselinum crispum*."
 Through the Photographer's Lens: The Personal Perspective of Twelve Photographers (April 2017). Group show, Coastal Arts League, Half Moon Bay, Calif.
- 2017 Celebration of Oneness Art Exhibition (October 2017). Juried group show, Rinconada Library, Palo Alto, Calif.

SELECTED PUBLICATIONS AND PATENT

- Fonseca F. N. (2018) Therapeutics. In: Oshá Root *Ligusticum porteri* J.M. Coulter & Rose and related species - Standards of Analysis, Quality Control, and Therapeutics. American Herbal Pharmacopoeia and Therapeutic Compendium.
- Fonseca F. N. and Balick M. J. (2018) Plant-Knowledge Adaptation in an Urban Setting: Candomblé Ethnobotany in New York City. *Economic Botany* 72 (1) 56-70.
- Fonseca F. N. (2014) The Two Faces of Purple Coneflower. In: 21st Century Herbal: A Practical Guide for Healthy Living Using Nature's Most Powerful Plants by Balick, M. J. Rodale Press, Emmaus, PA.
- Fonseca F. N., et al. (2014) *Echinacea purpurea* (L.) Moench modulates human T-cell cytokine response. *International Immunopharmacology* 19: 94-102.
- Lewis E., Ho M., Fonseca F. N. (granted in 2010) Composition for Enzyme Inhibition, U.S. Patent Application 20060128611.
- Fonseca F. N., et al. (2007) Capillary electrochromatography of selected phenolic compounds of *Chamomilla recutita*. *Journal of Chromatography A* 1154: 390-399.
- Kim K. B., Fonseca F. N., Crews C. M. (2005) Development and Characterization of Proteasome Inhibitors. *Methods in Enzymology* 399: 585-609.
- Schneekloth J. S., Fonseca F. N., et al. (2004) A Chemical Genetic Strategy for in vivo Loss of Protein Function. *Journal of the American Chemical Society* 126: 3748-3754.
- Fonseca F. N. and Tavares M. F. M. (2004) Method Validation and Standardization of Extracts of *M. recutita* L. Relatively to Free and Total Apigenin Contents by Capillary Electrophoresis. *Phytochemical Analysis* 15: 65-70.
- Fonseca F. N., et al. (2001) Critical Assessment of Electrolyte Systems for the Capillary Electrophoresis Analysis of Phenolic Compounds in Herb Extracts. *Journal of Micro-Column Separations* 13: 227-235.
- Fonseca F. N., et al. (2000) Phenylpropanoid Derivatives and Biflavones at Different Stages of Differentiation and Development of *Araucaria angustifolia*. *Phytochemistry* 55: 575-580.