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#### ACADEMIC DETAILS

Program	Major	University	Year	GPA
Doctor of Philosophy	Integrated Mathematical Oncology	University of South Florida		
Graduate Coursework	Modeling and Simulation	University of Central Florida	2023	3.78
Bachelor of Science	Molecular and Cell Biology	St. Petersburg College	2021	3.43
Certificate	Laboratory Science		2020	-
	Software / Web Development		2020	-

#### PROFESSIONAL AFFILIATIONS

Organization	Affiliation	Certification	Expiration
Society for Mathematical Biology	Student Membership		
American Society of Radiation Oncology	Trainee Membership		

#### TECHNICAL SKILLS

- **Languages** (C#, Java, R, MATLAB, Python, Lean), **Database** (MySQL), **Tools** (HOROS, L<sup>A</sup>T<sub>E</sub>X, Visual Studio, Rstudio).

#### MAJOR PROJECTS

1. **Moment-Informed Radiotherapy** (Dissertation Research)

(Guide: West J. , Aug 2023 - Current)

- Utilize the application of moment-capture to better characterize inter-patient heterogeneity and treatment-response observed in clinic, focusing on definitive radiation and combination therapies.
- Apply second-order principles to selecting optimal schedules of radiation delivery, minimizing acute toxicities and side-effect seen in clinic.

2. **Translational Tumor Board Rotation Program**

- The Translational Tumor Board Rotation Program is a specialized learning experience designed for graduate students in cancer biology to bridge the gap between research and clinical practice. By participating in multidisciplinary tumor board meetings, students gain first-hand exposure to patient cases, treatment considerations, and clinical decision-making. This immersive environment enhances their understanding of how basic science discoveries translate into diagnostic strategies, targeted therapies, and personalized patient care. Ultimately, the program equips students with the knowledge to tailor their laboratory research to address clinically relevant questions and improve patient outcomes.

#### PUBLICATIONS

1. Cristian Axenie, Roman Bauer, Oliver López Corona, **Ari Barnett**, Jeffrey West. Evolutionary Antifragility. In Applied Antifragility in Natural Systems: From Principle to Applications (Chapter 3.3). Springer-Nature (to appear), 2025.

#### CONFERENCES & PRESENTATIONS

1. **SMB 2022 : Heidelberg, Germany**  
Predicting Patient Response in NSCLC using a Tumor Growth Inhibition (TGI) Model
2. **SMB 2023 : Columbus, OH**  
Modified Generative Adversarial Network Approaches for Creation of Synthetic Time-Series
3. **BIRS Workshop 2025: Mechanistic Learning in Mathematical Oncology**  
Moment Informed Radiotherapy

## TEACHING EXPERIENCE

### 1. St.Petersburg College

- (a) Supplemental and guest lecturer for: Calculus w/ Analytical Geometry I-III, Calculus based Physics I/II, Biostatistics w/ SAS Programming, Gross Anatomy (Imaging / Lab Techniques)

### 2. HIP-IMO : Moffitt Cancer Center

- (a) Primary lecturer for core student curriculum including: Mathematical Methods & Scientific Computing, Numeric and Symbolic Programming in MATLAB