



# “From Gene to Structure” Workshop Agenda

**Puerto Rico Science, Technology & Research Trust**  
**Carr 21 Int Pr 18 Bo**  
**Monacillo Urbano, San Juan**

<b>Day 1: Thursday, May 22nd</b>		
8:30 – 9:00 AM	<ul style="list-style-type: none"> <li>• Check-in, welcome breakfast, workshop logistics, and introductions</li> </ul>	Eddie & Nicole
9:00 – 9:45 AM	<ul style="list-style-type: none"> <li>• The Gene-to-Structure Pipeline – Why Structure Matters</li> <li>• Setting the big picture</li> </ul>	Juan Lopez-Garriga
9:45 – 10:30 AM	<ul style="list-style-type: none"> <li>• From Sequence to Expression: Protein Production Basics</li> <li>• Protein Purification Strategies</li> <li>• Chromatography types, tags, quality assessment</li> </ul>	Crissy Tarver
10:30 – 10:45 AM - Coffee Break		
10:45 – 11:30 AM	<ul style="list-style-type: none"> <li>• Structural Biology Techniques: Overview &amp; Practical Access</li> <li>• Crystallography, cryo-EM, NMR, SAXS—strengths, weaknesses, typical requirements, timelines</li> </ul>	Edward Snell
11:30 – 12:15 PM	<ul style="list-style-type: none"> <li>• PART 1 - X-ray Crystallography Deep Dive</li> <li>• Crystallization, data collection, and intro to structure solving</li> </ul>	Silvia Russi Crissy Tarver
12:15 – 1:15 PM - Lunch & Networking		
1:15 – 2:15 PM	<ul style="list-style-type: none"> <li>• PART 2 - X-ray Crystallography Deep Dive Continued</li> </ul>	Silvia Russi Crissy Tarver
2:15 – 3:00 PM	<ul style="list-style-type: none"> <li>• Accessing X-ray Sources</li> </ul>	Sabine Botha
3:00 – 3:15 PM - Coffee Break		
3:15 – 4:00 PM	<ul style="list-style-type: none"> <li>• SAXS, NMR and Alpha-Fold: Complementary Methods for Structural Information</li> <li>• Integrative modeling</li> </ul>	Edward Snell
4:00 – 5:00 PM	<ul style="list-style-type: none"> <li>• Discussion: “How Do I Get My Protein into a Structure?”</li> <li>• Case studies</li> <li>• Core facilities, remote access options, and common bottlenecks</li> </ul>	All Presenters

Day 2: Friday, May 23rd		
8:30 – 9:00 AM	<ul style="list-style-type: none"> <li>Breakfast &amp; Station Logistics</li> </ul>	Eddie & Nicole
9:00 – 9:45 AM	<ul style="list-style-type: none"> <li><i>“Next Steps”</i>: How to get crystallization center/beamtime and access to services discussed</li> <li>Student Funding Opportunities in Structural Biology: NIH fellowships, NSF GRFP, and Puerto Rico-specific funds</li> <li>Travel grants for beamlines and courses</li> </ul>	Nicole Terranova
9:45 AM – 12:00 PM	<ul style="list-style-type: none"> <li>Stations (see below)</li> </ul>	All Presenters
12:00 – 1:00 PM – Lunch & Networking		
1:00 – 3:00 PM	<ul style="list-style-type: none"> <li>Stations Continued</li> </ul>	All Presenters
3:00 PM	<ul style="list-style-type: none"> <li>Final Q&amp;A and Workshop Wrap-up Reflections, open discussion, suggestions for next steps and follow-up resources.</li> </ul>	All Presenters

	Title	Presenter		Time	Group 1	Group 2	Group 3	Group 4
Station 1	Data Processing and Collection	Silvia Russi		10:00 - 11:00 AM	Station 1	Station 2	Station 3	Station 4
Station 2	Crystallization Preparation	Crissy Tarver		11:00 - 12:00 PM	Station 2	Station 3	Station 4	Station 1
Station 3	Structural Refinement	Edward Snell		1:00 - 2:00 PM	Station 3	Station 4	Station 1	Station 2
Station 4	Experimental & Data Troubleshooting	Sabine Botha		2:00 - 3:00PM	Station 4	Station 1	Station 2	Station 3