

# Long Range Plan Update and Discussion

*NSAC Meeting, March 7, 2023*

*Gail Dodge*



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**OLD DOMINION**  
UNIVERSITY

## LRP Writing Committee

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Christine Aidala  
Ani Aprahamian  
Sonja Bacca  
Paulo Bedaque  
Lee Bernstein  
Joe Carlson  
Mike Carpenter  
Kelly Chipps  
Vincenzo Cirigliano  
Ian Cloet  
Andre de Gouvea  
Romualdo DeSouza  
Gail Dodge  
Evie Downie  
Jo Dudek  
Renee Fatemi  
Alexandre Gade  
Haiyan Gao

Susan Gardner  
Vicki Greene  
Auston Harton  
Raph Hix  
Tanja Horn  
Calvin Howell  
Yordanka Ilieva  
Barbara Jacak  
Thia Keppel  
Oliver Kester  
Josh Klein  
Krishna Kumar  
Kyle Leach  
Dean Lee  
Shelly Leshner  
Chen-Yu Liu  
Jorge Lopez  
Cecilia Lunardini

Richard Milner  
Filomena Nunes  
Dan Phillips  
Jorge Piekarewicz  
Dinko Pocanic  
Jianwei Qiu  
Sofia Quaglioni  
David Radford  
Rosi Reed  
Lijuan Ruan  
Martin Savage  
Carol Scarlett  
Bjoern Schenke  
Daniel Tapia Takaki  
Derek Teaney  
Brent VanDevender  
Ramona Vogt  
Nathalie Wall

Fred Wietfeldt  
John Wilkerson  
Richard Wilson  
Lindley Winslow  
Sherry Yennello  
Xiaochao Zheng

**International Observers:**  
Marek Lewitowicz (NuPECC)  
Byungsik Hong (ANPhA)



## Subcommittees (Chairs)

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- QCD (Richard Milner)
- Fundamental Symmetries (Brent VanDevender)
- Nuclear Structure & Nuclear Astrophysics (Ani Aprahamian)
- Workforce (Shelly Leshner)
- Applications (Calvin Howell and Mike Carpenter)
- Theory (Filomena Nunes)
- Crosscutting/interdisciplinary (Ian Cloet)
- Impact and synergies with other fields (Jorge Piekarewicz)
- Facilities (Haiyan Gao)
- International Context (Krishna Kumar)
- Budget (Sherry Yennello)



## Timeline

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- DNP organized town halls (Fall 2022)
- Kickoff meeting Oct. 26 in New Orleans
- Subcommittees formed
  - draft outline under discussion
  - writing assignments mostly done
- Whitepapers were submitted end of Feb (waiting for a couple more)
- LRP Outline – comments and modifications expected by March 15
- June 1 – 1<sup>st</sup> draft of Chapters 2 – 12 due to internal reviewers
- July 1 – 2<sup>nd</sup> draft of Chapter 2 – 12, including internal review comments
- July 10 – 14: Resolution Meeting
- Executive Summary and other revisions of LRP document in light of resolution outcomes
- October 2023 – draft report due
- Polished document finalized; Rollout



## Outline

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1. Executive Summary
2. Nuclear Physics: Opportunity and Impact
3. QCD
4. Nuclear Structure and Reactions
5. Nuclear Astrophysics
6. Fundamental Symmetries, Neutrons, and Neutrinos
7. Theory
8. Workforce
9. Facilities
10. Emerging Technologies and Innovation
11. Applications
12. Budget
13. Appendices



## Websites/ Information

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- APS Engage platform: NSAC Long Range Plan
- NuclearScienceFuture.org
  - Right now this is a simple website with information and whitepapers
  - Hopefully eventually it will be a site with long-term information and ancillary materials related to the long range plan.

If you see a white paper that is not included, please send to Gail



## Communication Plan/Rollout

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- Committee is being formed (~10 members)
- First meeting hopefully end March or early April
- Tasks:
  1. Polish and format LRP; print
  2. Plan and create additional useful materials
  3. Design and maintain webpage: [NuclearScienceFuture.org](http://NuclearScienceFuture.org)
  4. Plan meetings and presentations with DOE, NSF, Congress, etc.



## Questions, Concerns, Suggestions

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Please contact me or any LRP committee member

Gail Dodge: [gdodge@odu.edu](mailto:gdodge@odu.edu)

