

Management and Coordination Plan

The (co-)PIs, all of whom are from Illinois Tech, will serve together as the Management Team for this project:

- Fred J. Hickernell (PI), Professor of Applied Mathematics and Director of the Center for Interdisciplinary Scientific Computation (CISC),
- Sou-Cheng Choi (co-PI), Research Associate Professor of Applied Mathematics and Lead Researcher at Allstate,
- David Minh, Assistant Professor of Chemistry and Associate Director of CISC,
- Xian-He Sun, Distinguished Professor of Computer Science, and
- Jeff Wereszczynski, Assistant Professor of Physics.

The Management Team will meet bi-monthly to share progress of the project initiatives, discuss challenges that arise, and strategize on how to make our initiatives more effective.

The Management Team will be assisted by the following Illinois Tech colleagues:

- Norman Lederman (Senior Personnel), Distinguished Professor of Science Education,
- Kiaw Wah Ong (Senior Personnel), Lecturer in Mathematics, and
- April Welch (Internal Collaborator), Associate Vice-President of Strategic Initiatives.

They will meet with the whole Management Team or with individual (co-)PIs as needed.

As mentioned in Sect. 5 of the Project Description, an External Advisory Board will be formed, consisting of the following members:

- Dr. Tom Carter, Professor of Physics at College of DuPage (CoD),
- Dr. Lois Curfman McInnes, Senior Computational Scientist in the Mathematics and Computer Science Division at Argonne National Laboratory, and
- Dr. Burt Holzman, Assistant Director of the Scientific Computing Division at Fermi National Accelerator Laboratory (Fermilab).

The table below shows the persons responsible for each major task. The first person listed for each task takes the lead. The budget column lists the financial support from the proposed grant for each item, including materials and supplies (Mat), summer salaries (Sal), stipends (Sti), subistence (Sub), and travel (Tra). HSal denotes salary for Hickernell, and LSal, MSal, SSal, and WSal have analogous meanings. Budget entries “Tuition” are covered by the tuition received from enrolled students.

Task (with reference to the Project Description)	Persons	Budget
3.3 Summer computational science course		
– Course design and content creation	Ong, Hickernell	HSal
– Advertisement to prospective students	Welch, Ong	Mat
– Instruction and supervision of TAs	Ong	Tuition
– Evaluation	Lederman, Ong	LSal
3.4 Advertisement of our computational course offerings	Hickernell	Mat
3.4.1 Enriched existing computational science offerings		
– Applied mathematics	Hickernell	HSal
– Chemistry	Minh	MSal
– Computer science	Sun	SSal
– Physics	Wereszczynski	WSal
3.4.3 Professional practices for computational science course		
– Course design and content creation	Hickernell, Choi	HSal
– Instruction	Hickernell, Choi	Tuition

	– Evaluation	Lederman, Hickernell	LSal, HSal
3.4.4	Undergraduate parallel and distributed computing course		
	– Content revision	Sun	SSal
	– Instruction	CS faculty	Tuition
	– Evaluation	Lederman, Sun	LSal, SSal
3.4.5	Large-scale scientific computation course		
	– Content revision	Sun	SSal
	– Instruction	CS faculty	Tuition
	– Evaluation	Lederman, Sun	LSal, SSal
3.5	Research experiences for community college students		Sti
	– Recruiting students from CoD	Wereszczynski, Carter	WSal
	– Crash course design and instruction	Minh, Wereszczynski	MSal, WSal
	– Weekly lunchtime discussions	Wereszczynski	Sub
	– Evaluation	Lederman, Minh, Wereszczynski	LSal, MSal, WSal
3.6	CISC undergraduate and graduate summer fellowships		Sti
	– Identifying project opportunities in national labs and companies	Hickernell, Choi, Minh, Sun, Wereszczynski, Curfman McInnes, Holzman	HSal, MSal, SSal, WSal
	– Advertisement of opportunities	Hickernell, Minh	HSal, MSal
	– Selection of CISC Fellows	Hickernell, Choi, Minh, Sun, Wereszczynski	HSal, MSal, SSal, WSal
	– Concluding poster session for CISC Fellows and CoD students	Minh, Hickernell	MSal, HSal
	– Evaluation	Lederman, Hickernell	LSal, HSal
4.6	Attend PI meeting at the NSF	Hickernell	Tra
4.6	Publish findings in journals and online	Hickernell, Choi, Minh, Sun, Wereszczynski, Lederman, Ong	HSal, MSal, SSal, WSal, LSal
4.6	Share findings at conferences	Hickernell, Choi, Minh, Sun, Wereszczynski, Lederman, Ong	Tra, HSal, MSal, SSal, WSal, LSal
5	Organizing meetings of the Management Team and the External Advisory Board	Hickernell	HSal