

PPMI Status Update

Ken Marek

PPMI Investigators Meeting

May 2, 2012

New York, NY



PARKINSON'S
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INITIATIVE

Play a Part in Parkinson's Research



PD patient vignette

- **67 yo right headed WF in excellent general health**
- **History**
 - 6 month history of poor tennis play**
 - Note 1-2 years – mild constipation**
 - 2 months intermittent R UE tremor while reading the newspaper, or if in stressful situation**
- **Exam**
 - Mild R UE resting tremor**
 - Reduced R arm swing**
- **PD DIAGNOSIS – 1 MONTH AGO**
- **“IF THE SYMPTOMS REMAIN AS THEY ARE NOW – I COULD DEAL WITH THIS”**



PPMI-PD patient vignette

- **62 yo right headed WM lawyer in excellent general health**
- **History**
 - 9 month history of slowly worsening R UE tremor**
 - 6 month history of R shoulder pain**
 - 3 months voice less reliable in public speaking**
- **Exam**
 - Mild R UE resting tremor**
 - Mild R bradykinesia**
- **PD DIAGNOSIS – 3 MONTH AGO**
- **“PPMI is attractive because no meds and I can do something that will help research”**



PPMI-Control vignette

- **62 yo right headed WF school principal in excellent general health**
- **History**
Husband has PD for 17 years
No previous participation in clinical research
- **Exam**
Normal
- **“PPMI is something I can do for my husband even if he can’t join the study”**



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PPMI- Prodromal vignette

- **64 yo right headed WM painter in excellent general health**
- **Noticed no longer bothered by smell of paint x 2-3 years**
- **Wife reports episodic jumping out of bed during sleep**
- **Maybe balance not quite as good on ladders**

Exam

Normal

- **Can PPMI track prodromal period in individuals at high risk for PD –
P-PPMI**



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Parkinson's Progression Markers Initiative

Requirements for Biomarker Infrastructure

Specific Data Set

- Appropriate population (early stage PD and controls)
- Clinical (motor/non-motor) and imaging data
- Corresponding biologic samples (DNA, blood, CSF)

Standardization

- Uniform collection of data and samples
- Uniform storage of data and samples
- Strict quality control/quality assurance

Access/Sharing

- Data available to research community → data mining, hypothesis generation & testing
- Samples available for studies



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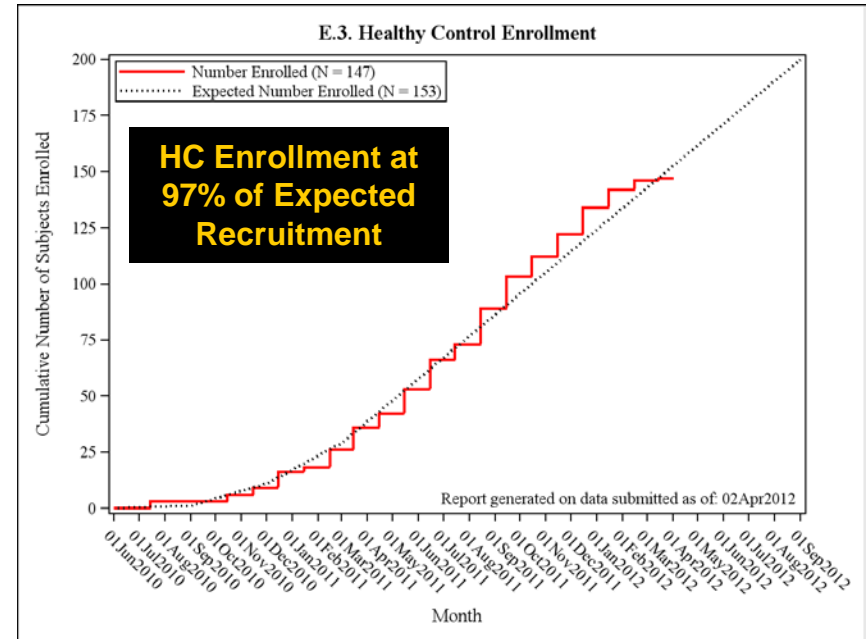
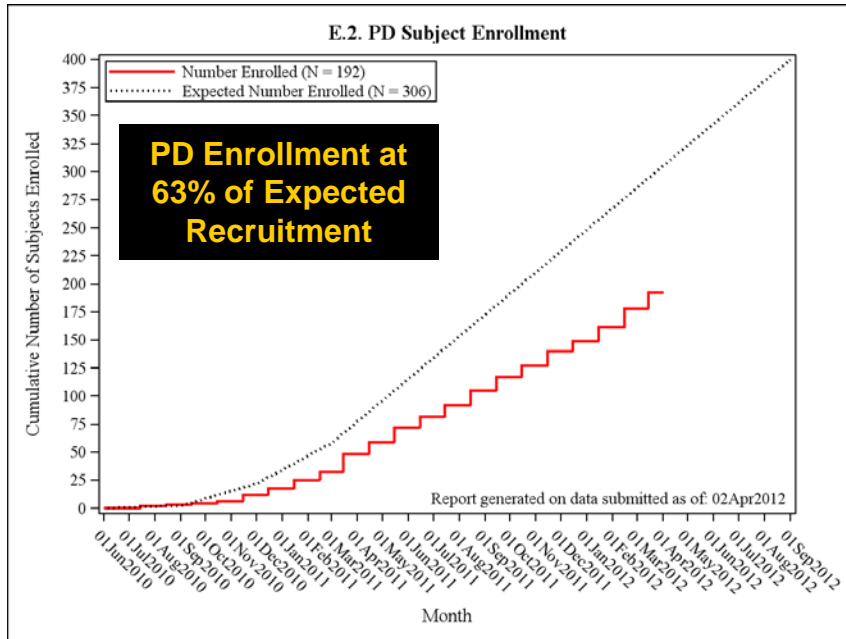
Play a Part in Parkinson's Research

Establish a Specific Data Set

- **Enrollment** – 204 PD 149 HS 25 SWEDD - **378 subjects**
- **Retention** – 202 PD 146 HS 24 SWEDD - **372 subjects**
- **Study governance** - weekly meetings of the executive steering committee and monthly meetings of the full steering committee consisting of all study cores
- **Data flow** from sites to Study Cores to LONI. Outstanding success in collection of study data (98% LP at baseline and about 90% overall at 6 months and 12 months)
- **Data presentation** at major scientific meetings



ENROLLMENT



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Recruitment – Early lessons learned

- **It is do-able, but challenging to recruit at planned rate –
1 PD/month, 1 control/2months**
- **Multiple strategies to enhance recruitment are necessary –
Fox Trial Finder**
- **Control recruitment on hold**
- **Recruitment challenge 400 subjects by July 4.**



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Recruitment – Retention - moving forward

- **Ongoing recruitment will require continued efforts**
- **Retention strategies are crucial**
 - **Continued participation in all assessments**
 - **Need for PD medications**
- **PPMI Longitudinal data**
 - **Subject assessments**
 - **Subject data**
- **PPMI as an iterative study**
 - **Additional assessments/studies/cohorts**
 - **D/C assessments**



Establish a Specific Data Set

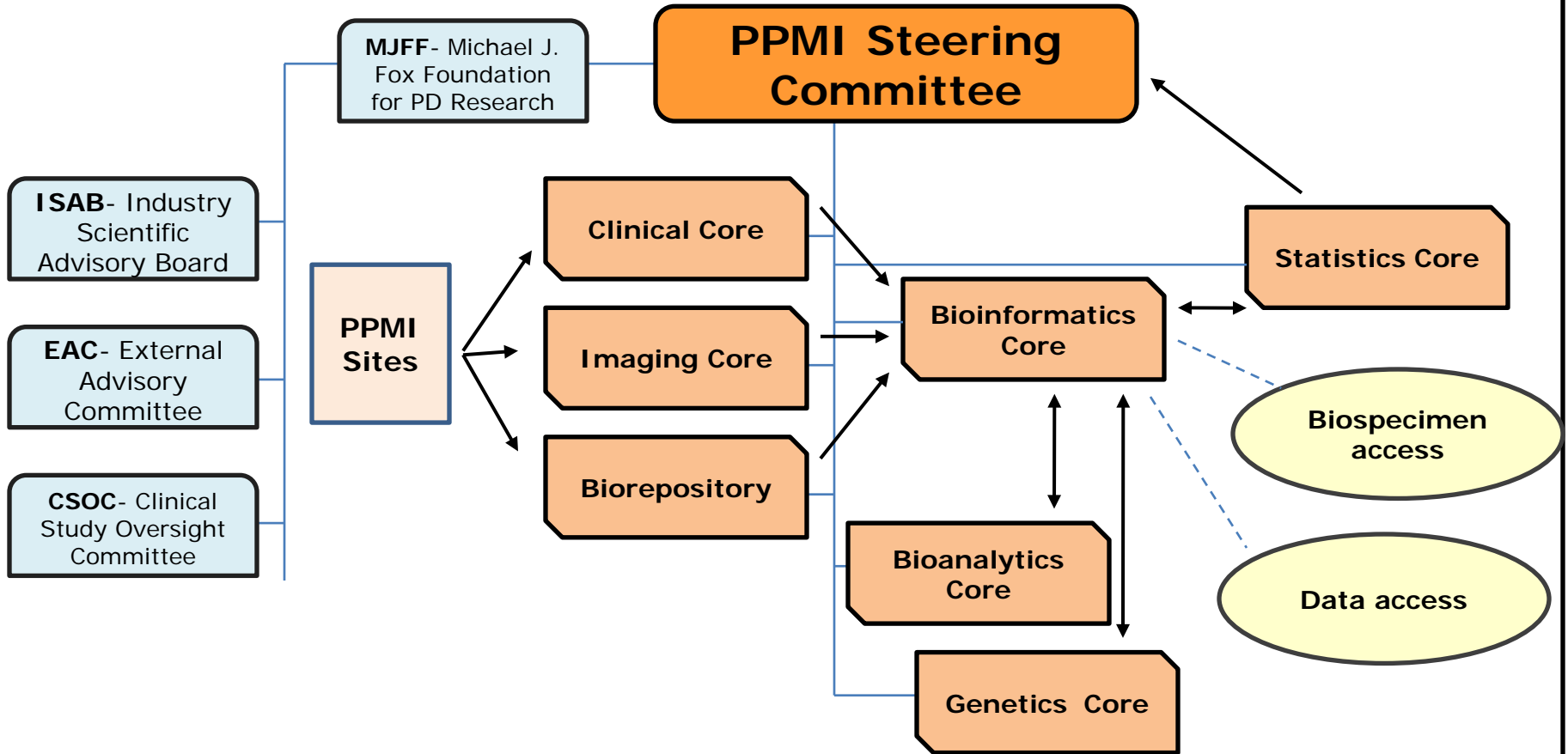
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PPMI Study



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Subject Enrollment & Sample Collection

Specimen	Collected Samples (Enrolled patients)							Total
	BL	V01	V02	V03	V04	V05	ST	
Plasma	370 (372)	280 (284)	178 (182)	114 (116)	79 (79)	5 (5)	37 (37)	1063 (1075)
	370 (372)	281 (284)	182 (182)	114 (116)	79 (79)	5 (5)	37 (37)	1068 (1075)
Serum	370 (372)	281 (284)	182 (182)	114 (116)	79 (79)	5 (5)	37 (37)	1068 (1075)
	358 (372)	6 (6)	161 (179)	-	68 (78)	-	32 (36)	625 (671)
CSF	358 (372)	6 (6)	161 (179)	-	68 (78)	-	32 (36)	625 (671)
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Standardization of data acquisition/analysis

- **Manuals/SOPs for all data acquisition**
- **Training for biosample collection and shipping, UPDRS, neuropsych, imaging acquisition and data transfer, clinical data entry.**
- **Quality control of biosamples, imaging data**



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Data/Biosample Access/Sharing

www.ppmi-info.org

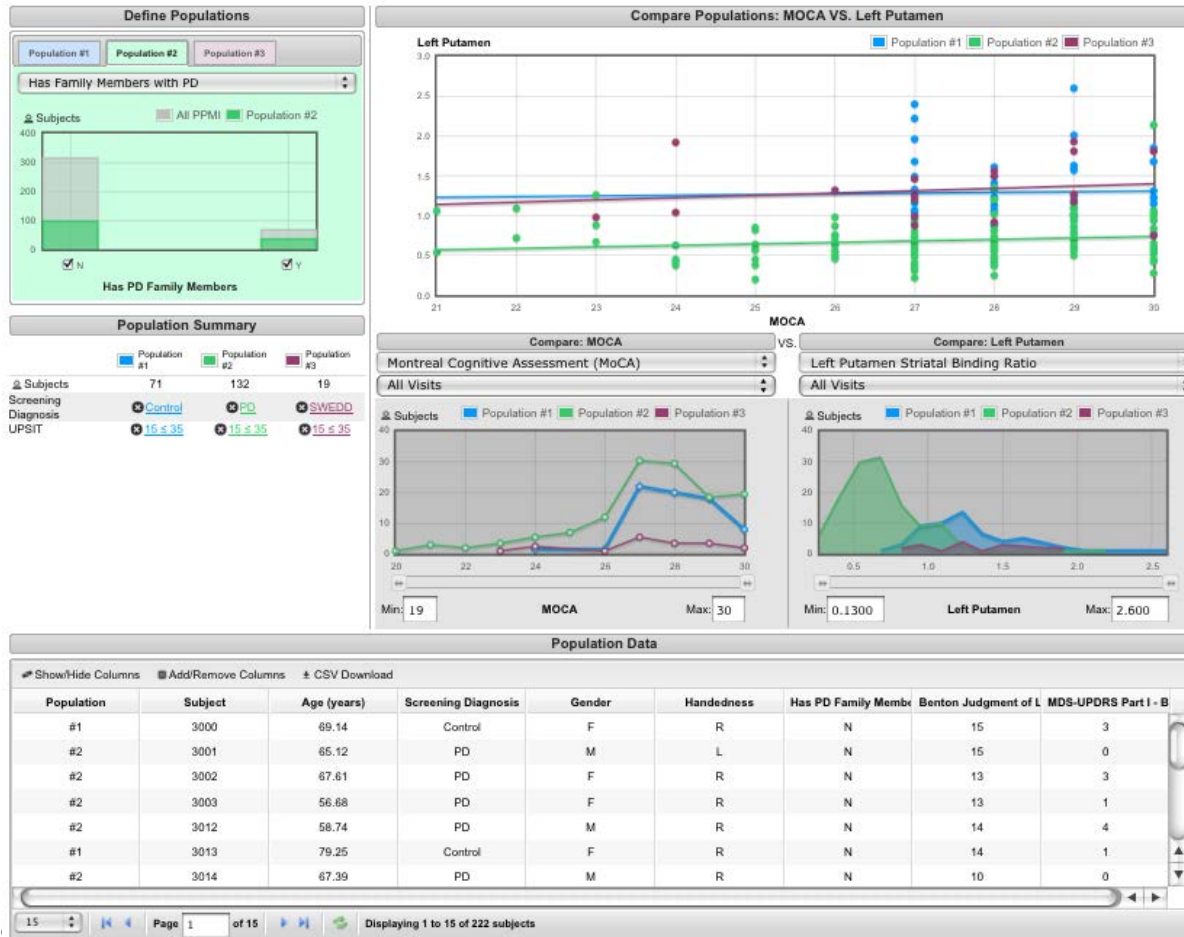
- **Biologic samples available via website**
- **Data available via website**
- **Ancillary study application through website**



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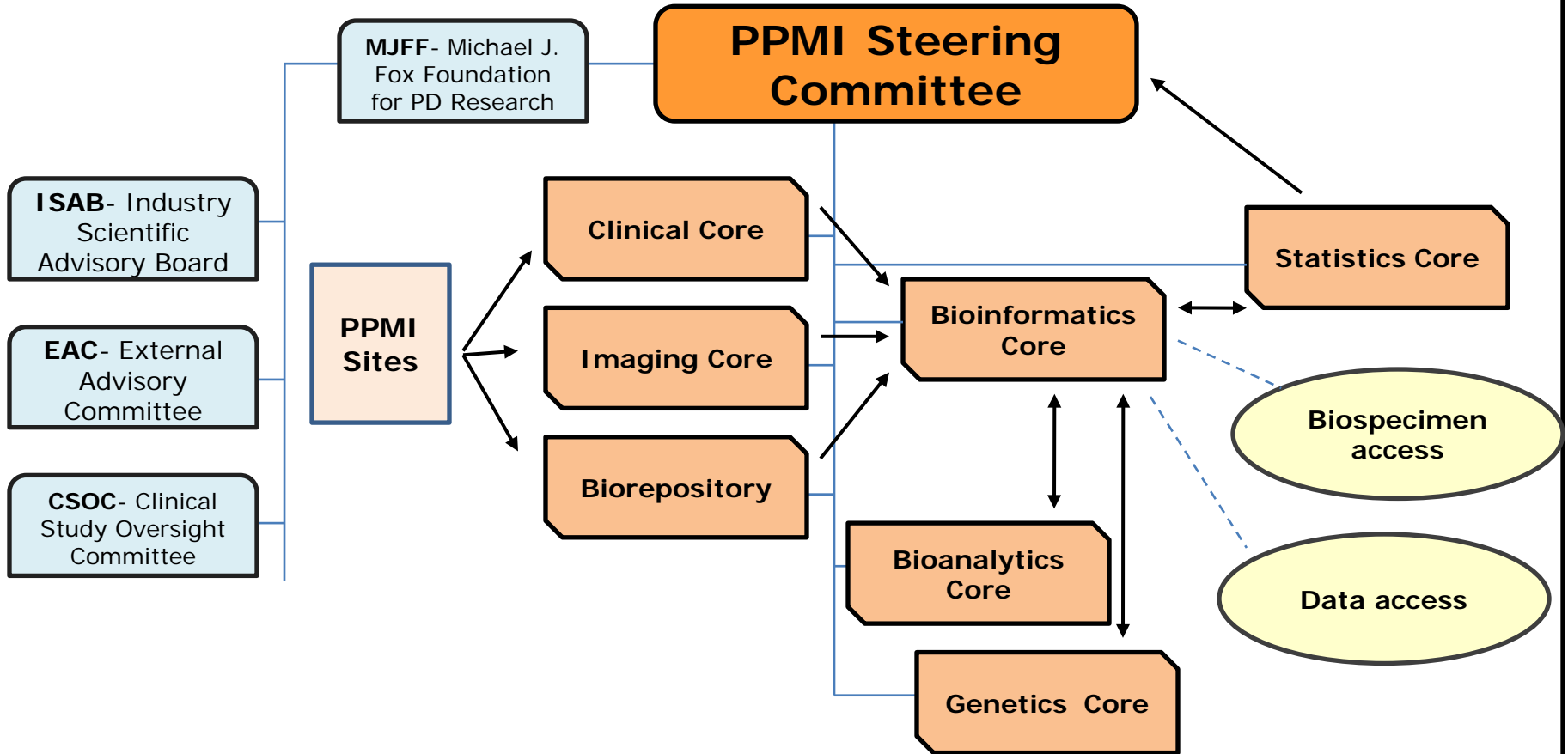
Visual Interrogation System



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PPMI Study



PPMI SC and Study Cores

Steering Committee	PI-K Marek, A Siderowf, C Tanner, D Jennings, K Kieburtz, W Poewe, B Mollenhauer, T Simuni, (core leaders, MJFF, ISAB), S Lasch
Clinical Coordination Core	<ul style="list-style-type: none"> ▪ University of Rochester's Clinical Trials Coordination Center • PI: Karl Kieburtz, Emily Flagg, Alice Rudolph, Cindy Casaceli
Imaging Core	<ul style="list-style-type: none"> ▪ Institute for Neurodegenerative Disorders • PI: John Seibyl, Norbert Schuff, Susan Mendick
Statistics Core	<ul style="list-style-type: none"> ▪ University of Iowa • PI: Chris Coffey, Qing Yang
Bioinformatics Core	<ul style="list-style-type: none"> ▪ Laboratory of Neuroimaging (LONI) at UCLA • PI: Arthur Toga, Karen Crawford
BioRepository	<ul style="list-style-type: none"> ▪ Coriell/BioRep • PI: Alison Ansbach, • Paola Casalin, Giulia Malferrari
Bioanalytics Core	<ul style="list-style-type: none"> ▪ University of Pennsylvania • PI: John Trojanowski, Les Shaw
Genetics Core	<ul style="list-style-type: none"> ▪ National Institute on Aging/NIH • PI: Andy Singleton



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PPMI Committees

- **Biologics**
 - John Trojanowski
 - Les Shaw
- **Imaging**
 - John Seibyl
- **Neuropsych /Neurobehavior**
 - Andrew Siderowf
- **Sleep**
 - Wolfgang Oertel
- **Genetics**
 - Andrew Singleton
- **Statistical**
 - Chris Coffey
- **Biospecimen review**
 - Gene Johnson
- **Data and publication**
 - David Standaert
- **Ancillary study**
 - Carlie Tanner
- **Recruitment/Retention**
 - Danna Jennings
- **Website**
 - Carlie Tanner
- **CSOC**
 - Ron Pfeiffer



PPMI MJFF team

- **Sohini Chowdhury, PPMI Overall Project Manager**
- **Mark Frasier, PhD, Biologics (Biorepository selection; biologic collection SOPs, assay identification and optimization)**
- **Claire Meunier, Recruitment/Retention Strategies**
- **Jamie Eberling, PhD, Imaging Core and imaging SOPs**
- **Debi Brooks, Industry partnership development, Recruitment/Retention Strategies**
- **Todd Sherer, PhD, MJFF CEO**



Industry Scientific Advisory Board (ISAB) Membership



Michelle Collins
Katherine Widnell



Mark Mintun

biogen idec

Bernard Ravina,
Chair-elect



Peggy Taylor



Ted Yednock



Igor Grachev



Marcel van der Brug



Alastair Reith



Johan Luthman
David Michelson



Thomas Comery,
Chair



Susanne Ostrowitzki
Paulo Fontoura



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Meeting Goals

- **Review study success**
 - **Develop and implement PPMI infrastructure, enrollment, retention.**
 - **Highlights – CSF, DTI, DAT, UPDRS**
- **Meet study challenges**
 - **Recruitment of PD. Retention.**
 - **Continue rigorous efforts to acquire high quality data.**
- **PPMI must continue to be innovative**
 - **Novel analytes, imaging tools, clinical assessments, analyses**
 - **P-PPMI implementation**



Annual Investigators Meeting

May 2/3, 2011

AGENDA

Wednesday May 2, 2012

2:30-2:45 pm	Welcome and Introductions	Marek, Sherer
2:45-3:00 pm	PPMI Status Update <ul style="list-style-type: none"> • Sites • Recruitment data • Enrollment • Taskforces, Committees, ISAB 	Marek
3:00-3:30 pm	Clinical Data Recap <ul style="list-style-type: none"> • Demographic Information • Collected data (motor, non-motor, neuropsych and neurobehavioral) • Data entry and future training 	Coffey, Kiebertz
3:30-4:00 pm	Imaging Recap <ul style="list-style-type: none"> • Update and data on DaTSCAN, DTI and MRI • Future training 	Seibyl, Schuff
4:00-4:45 pm	Biologics Recap <ul style="list-style-type: none"> • Update on inventory/process • Data on received samples • Biospecimen request process/Biospecimen Review Committee (BRC) 	Scutti, Frasier Shaw
4:45-5:15 pm	Report from Industry Scientific Advisory Board	Comery
5:15-5:30 pm	Closing Remarks – Preparation for Tomorrow	Marek
6:00 pm	Dinner (Venue TBD)	All

Thursday May 3, 2012

8:00-8:30 am	Breakfast	All
8:30-9:30 am	Recruitment and retention <ul style="list-style-type: none"> • Summary of recruitment strategies • Site examples of success • Approaches and challenges to retention 	Jennings, Meunier
9:30-10:00 am	Using PPMI Data <ul style="list-style-type: none"> • Access to PPMI Data • Downloading Data • Querying Data 	Lasch, Toga
10:00-10:15 am	Break	
10:15-11:15 am	Ancillary/Sub-Studies <ul style="list-style-type: none"> • Update on on-going Ancillary Studies (SWEDD, TAP-PD, etc.) • Upcoming ancillary/sub-studies 	Siderowf, Tanner
11:15-11:45 am	Strategies for PPMI analysis	Marek, Kiebertz
11:45-12:45 pm	Lunch – With Working Groups	
12:45-1:45 pm	Future PPMI Studies – Recommendations from Working Groups (WG) <ul style="list-style-type: none"> • Cognitive/Neuropsych WG: Identifying dementia • Biologic WG: New analytes • Imaging WG: New imaging modalities 	Siderowf Frasier, Shaw Seibyl
1:45-2:45 pm	PPMI Data Analyses <ul style="list-style-type: none"> • Description of planned analyses • Input on future analyses 	Coffey, Kiebertz, Marek
2:45-3:45 pm	P-PPMI: Pre-Motor-PPMI Proposal	Marek
3:45-4:00 pm	Sharing PPMI Data and Activities <ul style="list-style-type: none"> • Publications, Talks, Abstracts • Upcoming meetings and activities at meetings 	
4:00-4:15 pm	Closing <ul style="list-style-type: none"> • 2013 Annual Meeting dates 	Marek



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